

Notice of Allowability

Application No.

10/783,599

Examiner

Navneet K. Ahluwalia

Applicant(s)

MADAN ET AL.

Art Unit

2166

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 05/02/2007.
2. ☒ The allowed claim(s) is/are 18,21-27,35 and 38-42 (Renumbered as 1-14).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>07142007</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAILED ACTION

1. This communication is in response to the interview on 07/12/2007.

After a search and thorough examination of the present application and in light of the prior art made of records, claims 18, 21 – 27, 35, 38 – 42 as amended in fax copy are allowed.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney, Shirley Lee Anderson, Registration No. 57,763 on 07/12/2007.

Please amend the claims filed on 05/02/2007 as follows:

1 – 17 (Cancelled).

18 (Currently Amended) One or more computer-readable media comprising computer-executable instructions stored that, when executed on a computer, perform the following steps:

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creating an object model that maps object properties to an object template that conforms to a query protocol, wherein the object conforms to an object protocol that is different than the query protocol;

identifying a query value;

referencing the object template to locate an object property corresponding to the query value;

identifying a property value assigned to the object property; and

evaluating the property value against the query value to determine if the query is satisfied by the property value;

wherein the object properties are mapped to the object template and the property value is evaluated against the query without serializing object data;

wherein the query protocol is eXtensible Markup Language (XML) and the object protocol is Common Language Runtime (CLR).

19 – 20 (Cancelled).

21 (Original) The one or more computer-readable media as recited in claim 18, wherein the object model is an info set model that corresponds to the object.

22 (Original) The one or more computer-readable media as recited in claim 18, wherein the creating an object model further comprises creating only a portion of the object model that is necessary to discover the object property tested by the query.

23 (Original) The one or more computer-readable media as recited in claim 18, further comprising storing the object model so that it can be retrieved for future query evaluations against the object to avoid having to re-create the object model.

24 (Original) The one or more computer-readable media as recited in claim 18, wherein the creating an object model further comprises retrieving a partially completed version of an object model and augmenting the object model to an extent necessary to locate the object property that corresponds to the query value.

25 (Original) The one or more computer-readable media as recited in claim 18, further comprising:

generating one or more opcodes to perform the referencing step, the identifying a property value step and the evaluating step;

storing the one or more opcodes in memory; and

wherein the opcodes can be retrieved and utilized to perform similar steps in a subsequent query evaluation involving the object.

26 (Original) The one or more computer-readable media as recited in claim 25, wherein the opcodes can be compiled and executed dynamically at runtime.

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27 (Original) The one or more computer-readable media as recited in claim 18, wherein the query further comprises an XPath filter.

28 – 34 (Cancelled).

35 (Currently Amended) A method, comprising:

- mapping object properties to template elements;
- identifying a query value in a query against which the object is to be evaluated;
- referencing the template to identify an element corresponding to the query value;
- identifying an object property value corresponding to the identified template element;
- comparing the object property value to the query value to evaluate at least a portion of the query; and
- wherein the object is derived from an object language, the query is derived from a query language, and the steps are accomplished without serializing data included with or referenced by the object;
- wherein the object properties are mapped to the template elements and the object property value is evaluated against the query without serializing object data;
- wherein the object language further comprises a Common Language Runtime (CLR) language;
- wherein the query language further comprises eXtensible Markup Language (XML).

36 – 37 (Cancelled).

38 (Original) The method as recited in claim 35, wherein the query language is XPath.

39 (Original) The method as recited in claim 35, further comprising using an object infoaset model that references object properties to map the object properties to template elements.

40 (Original) The method as recited in claim 39, further comprising building the infoaset model at least to the extent necessary to identify the correct object property value.

41 (Original) The method as recited in claim 39, further comprising retrieving the infoaset model from memory.

42 (Original) The method as recited in claim 39, further comprising:
retrieving a partial infoaset model from memory; and
if the object property value cannot be identified from the partial infoaset,
augmenting the infoaset model at least to the extent necessary to identify the correct
object property value.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Navneet K. Ahluwalia whose telephone number is 571-272-5636.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alam T. Hosain can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Navneet

Navneet K. Ahluwalia
Examiner
Art Unit 2166

Dated: 07/16/2007


HOSAIN ALAM
SUPERVISORY PATENT EXAMINER